Hecate Strait Juvenile Salmon Surveys: July 6-12 and July 30 -August 3, 1986

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ABSTRACT

Morris, J. F. T. and M. C. Healey. 1987. Hecate Strait juvenile salmon survey: July 6-12 and July 30 - August 3, 1986. Can. Data Rep. Fish. Aquat. Sci. 636: 65 p.

The Pacific Biological Station chartered a drum seiner for two cruises to Hecate Strait that took place from July 6 to July 12 and from July 30 to August 3, 1986. The primary purpose of the cruises was to gather data on species composition, size composition, and diet of the juvenile salmon population of Hecate Strait. This information will be used to validate predictions of juvenile salmon occurrence in Hecate Strait by a model which is responsive to different assumptions about coastal migratory behavior. The additional objectives were to gather information on the associated non-salmonid catch and on the temperature structure of Hecate Strait in the summer. This report presents the sampling and catch information collected, as well as the vertical temperature profiles of the sampled waters.

RESUME

Morris, J. F. T. and M. C. Healey. 1987. Hecate Strait juvenile salmon survey: July 6-12 and July 30 - August 3, 1986. Can. Data Rep. Fish. Aquat. Sci. 636: 65 p.

La Station de biologie du Pacifique a nolisé un senneur à tambour pour réaliser deux croisières dans le détroit d'Hécate, la première du 6 au 12 juillet et la seconde du 30 juillet au 3 août 1986. Ces pêches avaient pour objectif la collecte de données sur la composition en espèces, la répartition des tailles et l'alimentation des saumons juvéniles du détroit d'Hécate. Ces renseignements serviront à valider un modèle de prévisions de la présence des saumons juvéniles dans le détroit d'Hécate reposant sur diverses hypothèses de comportement migratoire côtier. On désirait aussi obtenir des renseignements sur les poissons autres que des salmonidés capturés au même moment ainsi que sur le régime thermique estival du détroit d'Hécate. On trouvera dans le rapport des données sur l'échantillonnage et les prises de même que les profils verticaux de température des eaux étudiées.

INTRODUCTION

This report presents data on juvenile salmon in Hecate Strait gathered by purse seine from July 6-12 and July 30-August 3, 1986. Healey (1986) developed a model that predicts the abundance, fork length, biomass, and food requirements of juvenile salmon in Hecate Strait for each week of the year under various assumptions of coastal migratory behaviour. For example, if it is assumed that juvenile salmon originating from southern and central coast rivers of British Columbia continue their northward, coastal migration through Hecate Strait, then the model predicts that by mid-July the juvenile population should be dominated by sockeye (Oncorhynchus nerka), pink (O. gorbuscha) and chum (O. keta) should be half as abundant, and chinook (O. tshawytscha) and coho (O. kisutch) should be present as minor components. If on the other hand, it is assumed that these juveniles migrate out to the North Pacific Ocean via Queen Charlotte Sound, then the model predicts that by mid-July, only chinook and coho should be present in Hecate Strait. Other assumptions about juvenile migratory behavior are also possible.

The primary purpose of the July 6-12 and July 30-August 3 cruises was to gather information on species composition, size composition, and diet of the juvenile salmon population of Hecate Strait in order to validate predictions made by the model.

In addition, we gathered information on non-salmonid species associated with the juvenile salmon catch, and on the thermal structure of the sampled waters in Hecate Strait.

METHODS

Vessel, gear, and duties:

The F/V PACIFIC FAITH, a 20 meter drum seiner was chartered by the Fisheries Research Branch of the Department of Fisheries and Oceans to conduct a juvenile salmon survey in Hecate Strait. Two research biologists accompanied the seiner to sort, weigh, and preserve the catch, to make XBT casts, to discuss fishing locations with the skipper, to record observations on weather and sea conditions, and to take notes of any problems with the sets.

A salmon seine onto which was stitched a fine mesh bunt was used to collect the juvenile salmon. The salmon seine measured 110 m in length and 30 m in depth and had a stretched mesh size of 14 cm. The fine mesh bunt was 80 m in length and 40 m in depth and had a stretched mesh size of 1.3 cm.

Sampling locations:

The original sampling strategy was to cover the southeastern area of Hecate Strait by making sets at four locations along several transect lines at

right angles to the coast extending from the south tip of Price Island (52°15'N) to Banks Island (53°20'N). In practice, weather and time restrictions permitted only two transects to be completed on each cruise. On the July 6-12 cruise, one transect off Price Island and another off the south tip of Banks Island were made (Fig. 1A). On the July 30-August 3 cruise, one transect off Price Island and another off the south end of the Estevan group of islands were made (Fig. 1B). In addition, when the weather and sea conditions in Hecate Strait made fishing impossible on the July 6-12 cruise, a number of of sets were made in the more protected waters of Caamano Sound, Loredo Channel, and Seaforth Channel (Fig. 1B).

The following is a daily account of the fishing activity from both the July 6-12 and the July 30-August 3 cruises.

The July 6-12 cruise:

July 7- A transect bearing 270° was completed off Price Island. Sets were made at 20, 15, 10, and 5 M offshore (Fig. 1A). Two sets and one XBT cast were made at each location.

July 8- A transect along a line running from Nicoll Island, which is located at the south tip of Banks Island, out to Copper Island off Moresby Island was completed. Sets were made 20, 13, and 10 M out from Nicoll Island, and also two nautical miles south of Terror Point (Fig. 1A). Two sets and one XBT cast were made at each location.

July 9- A transect bearing 240° off La Jeune Point on Dewney Island had been planned, but a gale warning for Hecate Strait was in effect. Instead, six sets at different locations were completed in Caamano Sound. XBT casts were made at four of these locations.

July 10- At 06:00, we left anchorage at Kitasu Bay intending to do a transect off the south tip of Aristazabal Island, but we encountered gale force winds and heavy seas in Loredo Sound which forced us back to harbour. At 10:45, we left Kitasu Bay again, crossed Loredo Sound in heavy seas, and headed into Loredo Channel. Two sets at different locations were completed in Loredo Channel (Fig. 1A). One XBT cast was made there.

July 11- At 05:00 we left Klemtu intending to do a second transect off the south tip of Price Island. However, we encountered heavy seas in Milbanke Sound, and we elected to fish Seaforth Channel instead. Six sets were made there at three locations (Fig. 1A). One XBT cast was made.

The July 30-August 3 Cruise:

July 31- A transect bearing 270° off the south tip of Price Island was completed. Sets were made at 10, 8, 5, and 3 M offshore (Fig. 1B). Two sets and one XBT cast were made at each station.

Aug 1- A transect bearing 260° off the south end of the Estevan group of islands was completed. Sets were made at 20, 16, 10, and 5 M offshore (Fig. 1B). Two sets were made at each location. An XBT cast was made at two locations along the transect.

Aug 2- A extension of the transect off the south tip of Price Island was completed. This time sets were made at 24, 18, and 12 nautical miles offshore (Fig. 1B). Two sets and one XBT cast were made at each location.

Purse seineing technique:

All sets were held open for 20 min before closing. Two sets were made at each sampling location along a transect--one held open to the south and the other to the north. This was done to detect any northward migration of juvenile salmon. If indeed the juvenile salmon were migrating north, then it might be expected that the south-facing sets would catch more juveniles than the north-facing sets.

Treatment of samples:

The juvenile salmon samples were preserved either by freezing or in 10% formalin. When preservation was by freezing, up to 50 juveniles were placed into a 51 x 56 cm plastic bag and the bag was placed in a 7 cu ft freezer. Preserving by this technique was not satisfactory because the freezing took too long and, as a consequence, the fish in most samples suffered from extensive belly burn. The frozen samples were suitable for length and weight measurements but were not suitable for stomach analysis.

The samples preserved in 10% formalin were used for length and weight measurements and for stomach analysis. To ensure rapid preservation of stomach contents, on the July 6-12 cruise the body cavity of each fish was cut open before immersion in formalin. On the July 30-August 3 cruise, formalin was injected into the body cavity of each fish, which was found to be faster and just as effective as cutting the fish open.

The non-salmonid catch was sorted by species and the total weight by species was measured aboard ship. Fork lengths from individual fish of each species were then taken as time permitted.

DATA

This report presents the sampling and catch information collected on the July 6-12 and July 30-August 3 cruises, and vertical temperature profiles of the sampled waters.

Table 1 presents information for each set on dates, times, locations, weather and sea conditions, water depths, surface water temperatures, tides, and the catch. The juvenile salmon catch is recorded as the number of each species caught as well as the percentage of each species in the catch if the total catch is not less than forty. The non-salmonid catch is recorded as the weight by species and the number of each species caught. Fork lengths of the individual fish of each species are listed in descending order since the number of non-salmonids was too few to justify the presentation of length frequency tables. The common names for the fish species mentioned in this table and their associated scientific names are as follows--chinook, Oncorhyncus tshawytscha; coho, O. kisutch; chum, O. keta; sockeye, O. nerka; pink, O. gorbuscha; spiny dogfish, Squalus acanthias; sablefish, Anoplopoma fimbria; herring, Clupea pallasii; yellowtail rockfish, Sebastes flavidus; and black rockfish, Sebastes melanops.

Table 2 presents the information on the temperature structure of the sample locations in Hecate Strait, Caamano Sound, Loredo Channel, and Seaforth Channel obtained from the recordings of XBT casts.

ACKNOWLEDGEMENT

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Healey, M. C. 1986. Modeling Juvenile Salmon Utilization of Hecate Strait, p. 17-19. In: A. V. Tyler (Ed.). Hecate Strait Project: Results of the First Two Years of Multispecies Fisheries Research. Can. Tech. Rep. Fish. Aquat. Sci. 1470: 50 p.

TABLE 1. SAMPLING AND CATCH INFORMATION.

SET:	1
DATE:	JULY 7,1986
TIME:	09:30
LOCATION:	20 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°16'W
SET DIRECTION:	NORTH
DEPTH:	144 METERS
WATER TEMP:	14°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	90% CLOUD COVER,HAZE
SUN:	VISIBLE THROUGH HAZE
RAIN:	NO RAIN
VISIBILITY:	5-10 KM
WIND SPEED:	<2 KM/HR
WIND DIRECTION:	
SEA STATE:	LIKE A MIRROR
TIDES:	00:20 14.0 FT (BELLA BELLA)
	07:15 1.8 FT
	13:45 12.5 FT
	19:00 6.7 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	2	-
CHUM	5	-
COHO	1	-
PINK	15	-
SOCKEYE	10	-
TOTAL	33	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	2
DATE:	JULY 7,1986
TIME:	10:00
LOCATION:	20 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°16'W
SET DIRECTION:	SOUTH
DEPTH:	144 METERS
WATER TEMP:	14°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	90% CLOUD COVER,HAZE
SUN:	VISIBLE THROUGH HAZE
RAIN:	
VISIBILITY:	5-10 KM
WIND SPEED:	<2 KM/HR
WIND DIRECTION:	
SEA STATE:	LIKE A MIRROR
TIDES:	00:20 14.0 FT (BELLA BELLA)
	07:15 1.8 FT
	13:45 12.5 FT
	19:00 6.7 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	0	-
COHO	0	-
PINK	0	-
SOCKEYE	0	-
TOTAL	0	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	3
DATE:	JULY 7,1986
TIME:	11:00
LOCATION:	15 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°07.5'W
SET DIRECTION:	NORTH
DEPTH:	136 METERS
WATER TEMP:	14°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	70% CLOUD COVER,HAZE
SUN:	VISIBLE THROUGH HAZE
RAIN:	
VISIBILITY:	5-10 KM
WIND SPEED:	<2 KM/HR
WIND DIRECTION:	
SEA STATE:	LIKE A MIRROR
TIDES:	00:20 14.0 FT (BELLA BELLA)
	07:15 1.8 FT
	13:45 12.5 FT
	19:00 6.7 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	1	-
CHUM	9	-
COHO	6	-
PINK	7	-
SOCKEYE	6	-
TOTAL	29	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	4
DATE:	JULY 7,1986
TIME:	11:50
LOCATION:	15 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°07.5'W
SET DIRECTION:	SOUTH
DEPTH:	136 METERS
WATER TEMP:	14°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	70% CLOUD COVER,HAZE
SUN:	VISIBLE THROUGH HAZE
RAIN:	
VISIBILITY:	5-10 KM
WIND SPEED:	<2 KM/HR
WIND DIRECTION:	
SEA STATE:	LIKE A MIRROR
TIDES:	00:20 14.0 FT (BELLA BELLA)
	07:15 1.8 FT
	13:45 12.5 FT
	19:00 6.7 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	6	-
COHO	4	-
PINK	3	-
SOCKEYE	1	-
TOTAL	14	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	5
DATE:	JULY 7,1986
TIME:	13:00
LOCATION:	10 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	128°59'W
SET DIRECTION:	NORTH
DEPTH:	167 METERS
WATER TEMP:	15°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER,HAZE
SUN:	VISIBLE THROUGH HAZE
RAIN:	
VISIBILITY:	5-10 KM
WIND SPEED:	<2 KM/HR
WIND DIRECTION:	
SEA STATE:	LIKE A MIRROR
TIDES:	00:20 14.0 FT (BELLA BELLA)
	07:15 1.8 FT
	13:45 12.5 FT
	19:00 6.7 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	59	25.7
COHO	1	0.4
PINK	160	69.6
SOCKEYE	10	4.3
TOTAL	230	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
SPINEY DOGFISH	<2.0	1	525

TABLE 1 (CONTINUED).

SET:	6
DATE:	JULY 7,1986
TIME:	13:45
LOCATION:	10 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	128°59'W
SET DIRECTION:	SOUTH
DEPTH:	167 METERS
WATER TEMP:	15°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER,HAZE
SUN:	VISIBLE THROUGH HAZE
RAIN:	
VISIBILITY:	5-10 KM
WIND SPEED:	<2 KM/HR
WIND DIRECTION:	
SEA STATE:	LIKE A MIRROR
TIDES:	00:20 14.0 FT (BELLA BELLA)
	07:15 1.8 FT
	13:45 12.5 FT
	19:00 6.7 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	22	24.2
COHO	0	0.0
PINK	60	65.9
SOCKEYE	9	9.9
TOTAL	91	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	4.5	3	450,400,390

TABLE 1 (CONTINUED).

SET:	7
DATE:	JULY 7,1986
TIME:	14:45
LOCATION:	5 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	128°51.5'W
SET DIRECTION:	SOUTH
DEPTH:	145 METERS
WATER TEMP:	15°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER,HAZE
SUN:	VISIBLE THROUGH HAZE
RAIN:	
VISIBILITY:	5-10 KM
WIND SPEED:	<2 KM/HR
WIND DIRECTION:	
SEA STATE:	LIKE A MIRROR
TIDES:	00:20 14.0 FT (BELLA BELLA)
	07:15 1.8 FT
	13:45 12.5 FT
	19:00 6.7 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	0	-
COHO	0	-
PINK	0	-
SOCKEYE	0	-
TOTAL	0	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	8
DATE:	JULY 7,1986
TIME:	15:30
LOCATION:	5 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	128°51.5'W
SET DIRECTION:	NORTH
DEPTH:	158 METERS
WATER TEMP:	15°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% WHITE CLOUDS
SUN:	ORB NOT VISIBLE,BUT BRIGHT AREA IN SKY
RAIN:	
VISIBILITY:	1-5 KM
WIND SPEED:	2-6 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	RIPPLED
TIDES:	00:20 14.0 FT (BELLA BELLA)
	07:15 1.8 FT
	13:45 12.5 FT
	19:00 6.7 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	130	29.9
COHO	0	0.0
PINK	291	67.1
SOCKEYE	13	3.0
TOTAL	434	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	<2.0	1	490
SPINEY DOGFISH	<2.0	2	525,375

TABLE 1 (CONTINUED).

SET:	9
DATE:	JULY 8,1986
TIME:	08:45
LOCATION:	20 MILES OFF BANKS IS.
LATITUDE:	52°54'N
LONGITUDE:	130°11'W
SET DIRECTION:	NORTH
DEPTH:	282 METERS
WATER TEMP:	14°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	ORB NOT VISIBLE
RAIN:	LIGHT RAIN
VISIBILITY:	1-5 KM
WIND SPEED:	2-6 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	RIPPLED
TIDES:	00:55 14.7 FT (BELLA BELLA)
	07:50 1.7 FT
	14:15 12.6 FT
	19:40 6.6 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	1	-
COHO	28	-
PINK	4	-
SOCKEYE	1	-
TOTAL	34	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	6.0	2	520,510

TABLE 1 (CONTINUED).

SET:	10
DATE:	JULY 8,1986
TIME:	09:15
LOCATION:	20 MILES OFF BANKS IS.
LATITUDE:	52°54'N
LONGITUDE:	130°11'W
SET DIRECTION:	SOUTH
DEPTH:	270 METERS
WATER TEMP:	14°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	ORB NOT VISIBLE
RAIN:	LIGHT RAIN
VISIBILITY:	1-5 KM
WIND SPEED:	2-6 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	RIPPLED
TIDES:	00:55 14.7 FT (BELLA BELLA)
	07:50 1.7 FT
	14:15 12.6 FT
	19:40 6.6 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	11	-
COHO	6	-
PINK	11	-
SOCKEYE	6	-
TOTAL	34	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	10.0	5	505,490,470, 440,440

TABLE 1 (CONTINUED).

SET:	11
DATE:	JULY 8,1986
TIME:	10:35
LOCATION:	13 MILES OFF BANKS IS.
LATITUDE:	52°58.5'N
LONGITUDE:	130°02'W
SET DIRECTION:	NORTH
DEPTH:	232 METERS
WATER TEMP:	14°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS,NOT BREAKING
TIDES:	00:55 14.7 FT (BELLA BELLA)
	07:50 1.7 FT
	14:15 12.6 FT
	19:40 6.6 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	127	30.2
COHO	8	1.9
PINK	281	66.8
SOCKEYE	5	1.2
TOTAL	421	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	2.4	1	525

TABLE 1 (CONTINUED).

SET:	12
DATE:	JULY 8,1986
TIME:	11:15
LOCATION:	13 MILES OFF BANKS IS.
LATITUDE:	52°58.5'N
LONGITUDE:	130°02'W
SET DIRECTION:	SOUTH
DEPTH:	238 METERS
WATER TEMP:	14°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	00:55 14.7 FT (BELLA BELLA)
	07:50 1.7 FT
	14:15 12.6 FT
	19:40 6.6 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	31	28.5
COHO	18	15.6
PINK	59	54.1
SOCKEYE	2	1.8
TOTAL	109	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	4.5	4	530,320,300, 270

TABLE 1 (CONTINUED).

SET:	13
DATE:	JULY 8,1986
TIME:	12:00
LOCATION:	10 MILES OFF BANKS IS.
LATITUDE:	53°01.5'N
LONGITUDE:	129°58'W
SET DIRECTION:	NORTH
DEPTH:	188 METERS
WATER TEMP:	14°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	00:55 14.7 FT (BELLA BELLA)
	07:50 1.7 FT
	14:15 12.6 FT
	19:40 6.6 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	28	25.0
COHO	25	22.3
PINK	56	50.0
SOCKEYE	3	2.7
TOTAL	112	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	4.5	2	510,460

TABLE 1 (CONTINUED).

SET:	14
DATE:	JULY 8,1986
TIME:	12:45
LOCATION:	10 MILES OFF BANKS IS.
LATITUDE:	53°01.5'N
LONGITUDE:	129°58'W
SET DIRECTION:	SOUTH
DEPTH:	188
WATER TEMP:	14°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	00:55 14.7 FT (BELLA BELLA)
	07:50 1.7 FT
	14:15 12.6 FT
	19:40 6.6 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	27	23.3
COHO	8	6.9
PINK	81	69.8
SOCKEYE	0	0.0
TOTAL	116	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	15
DATE:	JULY 8,1986
TIME:	14:20
LOCATION:	2 MILES OFF BANKS IS.
LATITUDE:	53°07.5'N
LONGITUDE:	129°56'W
SET DIRECTION:	NORTH
DEPTH:	174 METERS
WATER TEMP:	14°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	2-6 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	RIPPLED
TIDES:	00:55 14.7 FT (BELLA BELLA)
	07:50 1.7 FT
	14:15 12.6 FT
	19:40 6.6 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	6	10.2
CHUM	17	28.8
COHO	9	15.2
PINK	25	42.4
SOCKEYE	2	3.4
TOTAL	59	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	16
DATE:	JULY 8,1986
TIME:	15:00
LOCATION:	2 MILES OFF BANKS IS.
LATITUDE:	53°07.5'N
LONGITUDE:	129°56'W
SET DIRECTION:	SOUTH
DEPTH:	174 METERS
WATER TEMP:	14°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	2-6 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	RIPPLED
TIDES:	00:55 14.7 FT (BELLA BELLA)
	07:50 1.7 FT
	14:15 12.6 FT
	19:40 6.6 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	0	0.0
COHO	25	58.1
PINK	17	39.6
SOCKEYE	1	2.3
TOTAL	43	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	17
DATE:	JULY 9,1986
TIME:	10:00
LOCATION:	CAAMANO SOUND
LATITUDE:	52°54'N
LONGITUDE:	129°25.5'W
SET DIRECTION:	NORTH
DEPTH:	154 METERS
WATER TEMP:	12°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	LIGHT RAIN
VISIBILITY:	1-5 KM
WIND SPEED:	7-11KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	01:35 14.7 FT (BELLA BELLA)
	08:25 1.8 FT
	14:45 12.7 FT
	20:20 6.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	1	-
CHUM	0	-
COHO	8	-
PINK	2	-
SOCKEYE	0	-
TOTAL	11	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	18
DATE:	JULY 9,1986
TIME:	10:40
LOCATION:	CAAMANO SOUND
LATITUDE:	52°53.5'N
LONGITUDE:	129°23.5'W
SET DIRECTION:	NORTH
DEPTH:	288 METERS
WATER TEMP:	11.5°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	01:35 14.7 FT (BELLA BELLA)
	08:25 1.8 FT
	14:45 12.7 FT
	20:20 6.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	0	-
COHO	0	-
PINK	0	-
SOCKEYE	0	-
TOTAL	0	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	19
DATE:	JULY 9,1986
TIME:	12:00
LOCATION:	CAAMANO SOUND
LATITUDE:	52°52.5'N
LONGITUDE:	129°21'W
SET DIRECTION:	NORTH
DEPTH:	142 METERS
WATER TEMP:	11.5°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	01:35 14.7 FT (BELLA BELLA)
	08:25 1.8 FT
	14:45 12.7 FT
	20:20 6.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	1	-
COHO	7	-
PINK	2	-
SOCKEYE	0	-
TOTAL	10	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	20
DATE:	JULY 9,1986
TIME:	12:50
LOCATION:	CAAMANO SOUND
LATITUDE:	52°49'N
LONGITUDE:	129°13'W
SET DIRECTION:	NORTH
DEPTH:	138 METERS
WATER TEMP:	11.5°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	01:35 14.7 FT (BELLA BELLA)
	08:25 1.8 FT
	14:45 12.7 FT
	20:20 6.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	0	-
COHO	0	-
PINK	0	-
SOCKEYE	0	-
TOTAL	0	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	21
DATE:	JULY 9,1986
TIME:	14:00
LOCATION:	CAAMANO SOUND
LATITUDE:	52°48'N
LONGITUDE:	129°10.5'W
SET DIRECTION:	NORTH
DEPTH:	126 METERS
WATER TEMP:	12.5°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	12-18 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	SCATTERED WHITE CAPS
TIDES:	01:35 14.7 FT (BELLA BELLA)
	08:25 1.8 FT
	14:45 12.7 FT
	20:20 6.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	1	-
CHUM	0	-
COHO	14	-
PINK	0	-
SOCKEYE	0	-
TOTAL	15	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
SABLEFISH	<2.0	1	360

TABLE 1 (CONTINUED).

SET:	22
DATE:	JULY 9,1986
TIME:	14:50
LOCATION:	CAAMANO SOUND
LATITUDE:	52°48'N
LONGITUDE:	129°08.5'W
SET DIRECTION:	NORTH
DEPTH:	100 METERS
WATER TEMP:	12.5°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	12-18 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	SCATTERED WHITE CAPS
TIDES:	01:35 14.7 FT (BELLA BELLA)
	08:25 1.8 FT
	14:45 12.7 FT
	20:20 6.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	0	0.0
COHO	54	100.0
PINK	0	0.0
SOCKEYE	0	0.0
TOTAL	54	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
SABLEFISH	2.0	4	360,350,330, 320

TABLE 1 (CONTINUED).

SET:	23
DATE:	JULY 10,1986
TIME:	12:30
LOCATION:	LOREDO CHANNEL
LATITUDE:	52°42'N
LONGITUDE:	129°02'W
SET DIRECTION:	NORTH
DEPTH:	292 METERS
WATER TEMP:	12°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	LIGHT RAIN
VISIBILITY:	1/2-1 KM
WIND SPEED:	7-11KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	SCATTERED WHITE CAPS
TIDES:	02:10 14.4 FT (BELLA BELLA)
	08:55 2.1 FT
	15:25 12.9 FT
	21:00 6.4 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	1	1.6
CHUM	13	20.3
COHO	20	31.2
PINK	30	46.9
SOCKEYE	0	0.0
TOTAL	64	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	24
DATE:	JULY 10,1986
TIME:	01:15
LOCATION:	LOREDO CHANNEL
LATITUDE:	52°43'N
LONGITUDE:	129°04'W
SET DIRECTION:	NORTH
DEPTH:	258 METERS
WATER TEMP:	12°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	LIGHT RAIN
VISIBILITY:	1/2-1 KM
WIND SPEED:	12-18 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	SCATTERED WHITE CAPS
TIDES:	02:10 14.4 FT (BELLA BELLA)
	08:55 2.1 FT
	15:25 12.9 FT
	21:00 6.4 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	0	-
COHO	14	-
PINK	5	-
SOCKEYE	0	-
TOTAL	19	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	25
DATE:	JULY 11,1986
TIME:	08:30
LOCATION:	SEAFORTH CHANNEL
LATITUDE:	53°14'N
LONGITUDE:	128°15'W
SET DIRECTION:	NORTH
DEPTH:	440 METERS
WATER TEMP:	13.5°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1/2-1 KM
WIND SPEED:	19-29 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	SCATTERED WHITE CAPS
TIDES:	02:55 14.1 FT (BELLA BELLA)
	09:30 2.6 FT
	16:00 13.1 FT
	21:45 6.4 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	2	-
COHO	10	-
PINK	2	-
SOCKEYE	1	-
TOTAL	15	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	26
DATE:	JULY 11,1986
TIME:	09:00
LOCATION:	SEAFORTH CHANNEL
LATITUDE:	52°14.5'N
LONGITUDE:	128°21'W
SET DIRECTION:	NORTH
DEPTH:	262 METERS
WATER TEMP:	13.5°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1/2-1 KM
WIND SPEED:	19-29 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	SCATTERED WHITE CAPS
TIDES:	02:55 14.1 FT (BELLA BELLA)
	09:30 2.6 FT
	16:00 13.1 FT
	21:45 6.4 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	0	-
COHO	2	-
PINK	0	-
SOCKEYE	1	-
TOTAL	3	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	27
DATE:	JULY 11,1986
TIME:	09:35
LOCATION:	SEAFORTH CHANNEL
LATITUDE:	53°14'N
LONGITUDE:	128°15'W
SET DIRECTION:	NORTH
DEPTH:	404 METERS
WATER TEMP:	13.5°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1/2-1 KM
WIND SPEED:	19-29 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	SCATTERED WHITE CAPS
TIDES:	02:55 14.1 FT (BELLA BELLA)
	09:30 2.6 FT
	16:00 13.1 FT
	21:45 6.4 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	5	-
COHO	5	-
PINK	2	-
SOCKEYE	0	-
TOTAL	12	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	28
DATE:	JULY 11,1986
TIME:	10:15
LOCATION:	SEAFORTH CHANNEL
LATITUDE:	53°14.5'N
LONGITUDE:	128°18'W
SET DIRECTION:	NORTH
DEPTH:	258 METERS
WATER TEMP:	13.5°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER,GREY SKIES
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1/2-1 KM
WIND SPEED:	19-29 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	SCATTERED WHITE CAPS
TIDES:	02:55 14.1 FT (BELLA BELLA)
	09:30 2.6 FT
	16:00 13.1 FT
	21:45 6.4 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	4	-
CHUM	3	-
COHO	2	-
PINK	1	-
SOCKEYE	0	-
TOTAL	10	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	29
DATE:	JULY 31,1986
TIME:	13:40
LOCATION:	10 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°00'W
SET DIRECTION:	SOUTH
DEPTH:	204 METERS
WATER TEMP:	14.3°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	03:20 5.0 FT (BELLA BELLA)
	10:00 10.5 FT
	14:50 8.3 FT
	21:00 13.2 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	12	12.8
COHO	0	0.0
PINK	76	80.8
SOCKEYE	6	6.4
TOTAL	94	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	30
DATE:	JULY 31,1986
TIME:	14:15
LOCATION:	10 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°00'W
SET DIRECTION:	NORTH
DEPTH:	204 METERS
WATER TEMP:	14.3°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	03:20 5.0 FT (BELLA BELLA)
	10:00 10.5 FT
	14:50 8.3 FT
	21:00 13.2 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	4	-
COHO	0	-
PINK	12	-
SOCKEYE	0	-
TOTAL	16	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
SPINEY DOGFISH	4.4	2	810,590
HERRING	<2.0	6	156,149,145 145,136,135

TABLE 1 (CONTINUED).

SET:	31
DATE:	JULY 31,1986
TIME:	14:50
LOCATION:	8 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	128°56'W
SET DIRECTION:	NORTH
DEPTH:	216 METERS
WATER TEMP:	13.7°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	03:20 5.0 FT (BELLA BELLA)
	10:00 10.5 FT
	14:50 8.3 FT
	21:00 13.2 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	6	8.6
COHO	0	0.0
PINK	64	91.4
SOCKEYE	0	0.0
TOTAL	70	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
HERRING	<2.0	2	135,132

TABLE 1 (CONTINUED).

SET:	32
DATE:	JULY 31,1986
TIME:	15:30
LOCATION:	8 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	128°56'W
SET DIRECTION:	SOUTH
DEPTH:	194 METERS
WATER TEMP:	13.7°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	03:20 5.0 FT (BELLA BELLA)
	10:00 10.5 FT
	14:50 8.3 FT
	21:00 13.2 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	1	-
COHO	1	-
PINK	6	-
SOCKEYE	0	-
TOTAL	8	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	33
DATE:	JULY 31,1986
TIME:	16:15
LOCATION:	5 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	128°50'W
SET DIRECTION:	NORTH
DEPTH:	234 METERS
WATER TEMP:	13.3°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	03:20 5.0 FT (BELLA BELLA)
	10:00 10.5 FT
	14:50 8.3 FT
	21:00 13.2 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	24	16.5
COHO	0	0.0
PINK	118	81.4
SOCKEYE	3	2.1
TOTAL	145	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	<2.0	1	320
HERRING	<2.0	2	78,78

TABLE 1 (CONTINUED).

SET:	34
DATE:	JULY 31,1986
TIME:	13:40
LOCATION:	5 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	128°50'W
SET DIRECTION:	SOUTH
DEPTH:	212 METERS
WATER TEMP:	13.3°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	03:20 5.0 FT (BELLA BELLA)
	10:00 10.5 FT
	14:50 8.3 FT
	21:00 13.2 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	2	-
COHO	1	-
PINK	26	-
SOCKEYE	4	-
TOTAL	33	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
HERRING	<2.0	3	260,245,205

TABLE 1 (CONTINUED).

SET:	35
DATE:	JULY 31,1986
TIME:	17:25
LOCATION:	3 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	128°48'W
SET DIRECTION:	SOUTH
DEPTH:	220 METERS
WATER TEMP:	14.3°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	03:20 5.0 FT (BELLA BELLA)
	10:00 10.5 FT
	14:50 8.3 FT
	21:00 13.2 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	38	33.9
COHO	3	2.7
PINK	65	58.0
SOCKEYE	6	5.4
TOTAL	112	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	<2.0	1	400

TABLE 1 (CONTINUED).

SET:	36
DATE:	JULY 31,1986
TIME:	17:50
LOCATION:	3 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	128°48'W
SET DIRECTION:	NORTH
DEPTH:	226 METERS
WATER TEMP:	14.3°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	03:20 5.0 FT (BELLA BELLA)
	10:00 10.5 FT
	14:50 8.3 FT
	21:00 13.2 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	12	-
COHO	5	-
PINK	18	-
SOCKEYE	2	-
TOTAL	37	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	37
DATE:	AUG 1,1986
TIME:	09:00
LOCATION:	20 MILES OFF SOUTH END OF ESTEVAN GROUP
LATITUDE:	52°52'N
LONGITUDE:	130°10'W
SET DIRECTION:	NORTH
DEPTH:	268 METERS
WATER TEMP:	13.4°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	04:20 4.3 FT (BELLA BELLA)
	10:50 11.0 FT
	15:55 8.2 FT
	21:55 13.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	1	0.7
CHUM	16	11.2
COHO	1	0.7
PINK	118	82.5
SOCKEYE	7	4.9
TOTAL	143	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
HERRING	<2.0	2	275,270

TABLE 1 (CONTINUED).

SET:	38
DATE:	AUG 1,1986
TIME:	09:40
LOCATION:	20 MILES OFF SOUTH END OF ESTEVAN GROUP
LATITUDE:	52°52'N
LONGITUDE:	130°10'W
SET DIRECTION:	SOUTH
DEPTH:	268 METERS
WATER TEMP:	13.4°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	04:20 4.3 FT (BELLA BELLA) 10:50 11.0 FT 15:55 8.2 FT 21:55 13.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	4	2.4
CHUM	9	5.3
COHO	9	5.3
PINK	139	82.3
SOCKEYE	8	4.7
TOTAL	169	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
HERRING	2.4	16	280,260,260,260,260, 256,252,252,245,240 239,238,235,232,230 220

TABLE 1 (CONTINUED).

SET:	39
DATE:	AUG 1,1986
TIME:	10:15
LOCATION:	16 MILES OFF SOUTH END OF ESTEVAN GROUP
LATITUDE:	52°53.5'N
LONGITUDE:	130°02'W
SET DIRECTION:	NORTH
DEPTH:	264 METERS
WATER TEMP:	
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	04:20 4.3 FT (BELLA BELLA)
	10:50 11.0 FT
	15:55 8.2 FT
	21:55 13.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	10	7.3
COHO	1	0.7
PINK	114	82.6
SOCKEYE	13	9.4
TOTAL	138	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	<2.0	1	400

TABLE 1 (CONTINUED).

SET:	40
DATE:	AUG 1,1986
TIME:	10:50
LOCATION:	16 MILES OFF SOUTH END OF ESTEVAN GROUP
LATITUDE:	52°53.5'N
LONGITUDE:	130°02'W
SET DIRECTION:	SOUTH
DEPTH:	268 METERS
WATER TEMP:	
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	04:20 4.3 FT (BELLA BELLA)
	10:50 11.0 FT
	15:55 8.2 FT
	21:55 13.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	2	2.0
CHUM	4	4.0
COHO	38	37.6
PINK	56	55.4
SOCKEYE	1	1.0
TOTAL	101	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	41
DATE:	AUG 1,1986
TIME:	11:45
LOCATION:	10 MILES OFF SOUTH END OF ESTEVAN GROUP
LATITUDE:	52°54'N
LONGITUDE:	129°53'W
SET DIRECTION:	NORTH
DEPTH:	252 METERS
WATER TEMP:	14.0°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	04:20 4.3 FT (BELLA BELLA) 10:50 11.0 FT 15:55 8.2 FT 21:55 13.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	0	-
COHO	2	-
PINK	4	-
SOCKEYE	0	-
TOTAL	0	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
HERRING	3.8	15	285,279,278,265,260 257,253,250,250,240 238,235,228,225,215
SPINEY DOGFISH	3.0	1	700

TABLE 1 (CONTINUED).

SET:	42
DATE:	AUG 1,1986
TIME:	12:20
LOCATION:	10 MILES OFF SOUTH END OF ESTEVAN GROUP
LATITUDE:	52°54'N
LONGITUDE:	129°53'W
SET DIRECTION:	SOUTH
DEPTH:	256 METERS
WATER TEMP:	13.4°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	04:20 4.3 FT (BELLA BELLA)
	10:50 11.0 FT
	15:55 8.2 FT
	21:55 13.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	-
CHUM	0	-
COHO	31	-
PINK	2	-
SOCKEYE	0	-
TOTAL	33	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
HERRING	<2.0	1	232

TABLE 1 (CONTINUED).

SET:	43
DATE:	AUG 1,1986
TIME:	09:00
LOCATION:	5 MILES OFF SOUTH END OF ESTEVAN GROUP
LATITUDE:	52°56'N
LONGITUDE:	129°46'W
SET DIRECTION:	SOUTH
DEPTH:	136 METERS
WATER TEMP:	
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	04:20 4.3 FT (BELLA BELLA) 10:50 11.0 FT 15:55 8.2 FT 21:55 13.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	9	11.4
COHO	0	0.0
PINK	67	84.8
SOCKEYE	3	3.8
TOTAL	79	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	44
DATE:	AUG 1,1986
TIME:	13:45
LOCATION:	5 MILES OFF SOUTH END OF ESTEVAN GROUP
LATITUDE:	52°56'N
LONGITUDE:	129°46'W
SET DIRECTION:	NORTH
DEPTH:	268 METERS
WATER TEMP:	
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1-5 KM
WIND SPEED:	7-11 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	WAVELETS NOT BREAKING
TIDES:	04:20 4.3 FT (BELLA BELLA)
	10:50 11.0 FT
	15:55 8.2 FT
	21:55 13.5 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	0	0.0
COHO	5	8.6
PINK	44	75.9
SOCKEYE	9	15.5
TOTAL	58	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	45
DATE:	AUG 2,1986
TIME:	07:45
LOCATION:	24 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°23'W
SET DIRECTION:	NORTH
DEPTH:	174 METERS
WATER TEMP:	14.1°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1/2-1 KM
WIND SPEED:	2-6 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	RIPPLED
TIDES:	05:05 3.6 FT (BELLA BELLA)
	11:40 11.6 FT
	16:50 7.7 FT
	22:40 13.9 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	13	15.9
COHO	2	2.4
PINK	51	62.2
SOCKEYE	16	19.5
TOTAL	82	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	46
DATE:	AUG 2,1986
TIME:	08:10
LOCATION:	24 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°23'W
SET DIRECTION:	NORTH
DEPTH:	174 METERS
WATER TEMP:	14.1°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1/2-1 KM
WIND SPEED:	2-6 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	RIPPLED
TIDES:	05:05 3.6 FT (BELLA BELLA)
	11:40 11.6 FT
	16:50 7.7 FT
	22:40 13.9 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	1	0.7
CHUM	15	10.4
COHO	7	4.9
PINK	116	80.5
SOCKEYE	5	3.5
TOTAL	144	

CATCH OF NON-SALMONIDS: NONE

TABLE 1 (CONTINUED).

SET:	47
DATE:	AUG 2,1986
TIME:	08:50
LOCATION:	18 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°12'W
SET DIRECTION:	SOUTH
DEPTH:	174 METERS
WATER TEMP:	14.0°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1/2-1 KM
WIND SPEED:	2-6 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	RIPPLED
TIDES:	05:05 3.6 FT (BELLA BELLA)
	11:40 11.6 FT
	16:50 7.7 FT
	22:40 13.9 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	71	12.5
COHO	1	0.2
PINK	471	82.9
SOCKEYE	25	4.4
TOTAL	568	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	15.0	7	513,490,476,472 445,438,420
BLACK ROCKFISH	3.0	1	595
HERRING	<2.0	3	230,222,200

TABLE 1 (CONTINUED).

SET:	48
DATE:	AUG 2,1986
TIME:	09:45
LOCATION:	18 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°12'W
SET DIRECTION:	SOUTH
DEPTH:	176 METERS
WATER TEMP:	14.1°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1/2-1 KM
WIND SPEED:	2-6 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	RIPPLED
TIDES:	05:05 3.6 FT (BELLA BELLA)
	11:40 11.6 FT
	16:50 7.7 FT
	22:40 13.9 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	2	1.9
CHUM	6	5.8
COHO	8	7.8
PINK	80	77.7
SOCKEYE	7	6.8
TOTAL	103	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
YELLOWTAIL ROCKFISH	5.7	2	527,516
HERRING	<2.0	1	200

TABLE 1 (CONTINUED).

SET:	49
DATE:	AUG 2,1986
TIME:	10:15
LOCATION:	12 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°03'W
SET DIRECTION:	NORTH
DEPTH:	190 METERS
WATER TEMP:	14.3°C
XBT TAKEN:	YES
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1/2-1 KM
WIND SPEED:	2-6 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	RIPPLED
TIDES:	05:05 3.6 FT (BELLA BELLA)
	11:40 11.6 FT
	16:50 7.7 FT
	22:40 13.9 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	12	6.5
COHO	0	0.0
PINK	171	91.9
SOCKEYE	3	1.6
TOTAL	186	

CATCH OF NON-SALMONIDS:

SPECIES	WEIGHT OF SPECIES (KG)	NUMBER OF FISH	FORKLENGTHS (MM)
HERRING	1.7	10	250,238,230,210,202 168,166,158,146,142

TABLE 1 (CONTINUED).

SET:	50
DATE:	AUG 2,1986
TIME:	10:50
LOCATION:	12 MILES OFF PRICE IS.
LATITUDE:	52°16'N
LONGITUDE:	129°03'W
SET DIRECTION:	SOUTH
DEPTH:	186 METERS
WATER TEMP:	14.1°C
XBT TAKEN:	NO
WEATHER	
CLOUDS:	100% CLOUD COVER
SUN:	NOT VISIBLE
RAIN:	NONE
VISIBILITY:	1/2-1 KM
WIND SPEED:	2-6 KM/HR
WIND DIRECTION:	SOUTH-EAST
SEA STATE:	RIPPLED
TIDES:	05:05 3.6 FT (BELLA BELLA)
	11:40 11.6 FT
	16:50 7.7 FT
	22:40 13.9 FT

CATCH OF JUVENILE SALMON:

SPECIES	NUMBER	PERCENT
CHINOOK	0	0.0
CHUM	6	13.6
COHO	2	4.6
PINK	36	81.8
SOCKEYE	0	0.0
TOTAL	44	

CATCH OF NON-SALMONIDS: NONE

TABLE 2. VERTICAL TEMPERATURE PROFILES AT SET LOCATIONS IN HECATE STRAIT, CAAMANO SOUND, LOREDO CHANNEL, AND SEAFORTH CHANNEL.

SET	1	3	5	7
DATE	JULY 7	JULY 7	JULY 7	JULY 7
LATITUDE	52°16'N	52°16'N	52°16'N	52°16'N
LONGITUDE	129°16'W	129°7.5'W	128°59'W	128°51.5'W
TRANSECT	OFF PRICE IS.			
OFFSHORE DISTANCE (N. MI.)	20	15	10	5
SOUNDING (METERS)	104	136	167	145
	TEMPERATURE°C			
DEPTH (METERS)	SET 1	SET 3	SET 5	SET 7
0	14.5	14.5	14.5	14.3
10	10.6	11.3	10.0	10.5
20	8.6	9.9	8.6	8.6
30	8.0	8.0	8.0	7.5
40	7.6	7.0	7.2	7.2
50	6.9	6.7	6.8	6.8
60	6.7	6.7	6.7	
70	6.7	6.7	6.6	
80	6.7	6.7	6.5	
90	6.7	6.7	6.5	
100	6.7	6.7	6.5	
110		6.7	6.5	
120		6.7	6.5	
130		6.7	6.5	
140			6.5	
150			6.5	
160			6.5	
170				
180				
190				
200				

TABLE 2 (CONTINUED).

SET	9	11	13	15
DATE	JULY 8	JULY 8	JULY 8	JULY 8
LATITUDE	52°54'N	52°58.5'N	53°1.5'N	53°7.5'N
LONGITUDE	130°11'W	130°2'W	129°58'W	129°56'W
TRANSECT	OFF BANKS IS.			
OFFSHORE DISTANCE (N. MI.)	20	15	10	5
SOUNDING (METERS)	282	232	188	174

DEPTH (METERS)	TEMPERATURE°C SET 9	SET 11	SET 13	SET 15
0	14.0	14.0	13.8	14.0
10	12.2	13.8	10.4	10.5
20	9.3	12.6	9.8	9.1
30	7.8	12.3	9.7	8.3
40	7.2	12.1	9.6	6.7
50	6.7	11.8	9.5	5.5
60	6.1	11.6	9.3	5.4
70	5.8	11.2	9.0	5.3
80	5.7	11.0	8.9	5.3
90	5.3	10.2	8.9	5.3
100	5.2	10.0	8.9	5.3
110	5.2	9.8	8.9	5.3
120	5.2	9.6	8.8	5.3
130	5.2	9.5	8.7	5.3
140	5.2	9.4	8.7	5.3
150	5.2	9.3	8.6	5.3
160	5.2	9.0	8.5	5.3
170	5.2	9.0	8.5	5.3
180	5.2	9.0	8.5	
190	5.2	9.0		
200	5.2	9.0		

TABLE 2 (CONTINUED).

SET	/	17	18	21	22
DATE	/	JULY 9	JULY 9	JULY 9	JULY 9
LATITUDE	/	52°54'N	52°53.5'N	52°48'N	52°48'N
LONGITUDE	/	129°25.5'W	129°25.5'W	129°10.5'W	129°8.5'W
LOCATION	/	CAAMANO SOUND			
SOUNDING (METERS)	/	154	288	126	96
	/	TEMPERATURE°C			
DEPTH (METERS)	/	SET 17	SET 18	SET 21	SET 22
0	/	12.5	11.5	12.8	13.0
10	/	9.2	10.5	10.2	9.0
20	/	8.0	8.5	8.7	8.1
30	/	7.7	8.0	8.2	7.7
40	/	7.3	7.8	7.9	7.7
50	/	7.2	7.3	7.7	7.7
60	/	7.1	7.2	7.6	7.7
70	/	7.1	7.1	7.6	7.7
80	/	7.1	7.1	6.5	7.7
90	/	7.1	7.0	6.5	7.7
100	/	7.1	7.0	6.5	7.7
110	/	7.1	7.0	6.5	
120	/	7.1	7.0	6.5	
130	/	7.1	7.0		
140	/	7.1	7.0		
150	/	7.1	7.0		
160	/		7.0		
170	/		7.0		
180	/		7.0		
190	/		7.0		
200	/		7.0		

TABLE 2 (CONTINUED).

SET	23	26
DATE	JULY 10	JULY 11
LATITUDE	52°42'N	52°14.5'N
LONGITUDE	129°2'W	128°21'W
LOCATION	LOREDO CH.	SEAFORTH CH.
SOUNDING (METERS)	292	262
DEPTH (METERS)	TEMPERATURE°C SET 23	SET 26
0	11.7	14.0
10	9.6	13.2
20	9.3	9.8
30	8.3	7.7
40	7.8	7.5
50	7.7	7.3
60	7.7	7.2
70	7.7	7.1
80	7.6	7.0
90	7.5	7.0
100	7.5	7.0
110	7.5	7.0
120	7.5	6.9
130	7.5	6.8
140	7.5	6.8
150	7.5	6.8
160	7.5	6.8
170	7.5	6.8
180	7.5	6.8
190	7.5	6.8
200	7.5	6.8

TABLE 3 (CONTINUED).

SET	29	31	33	35
DATE	JULY 31	JULY 31	JULY 31	JULY 31
LATITUDE	52°16'N	52°16'N	52°16'N	52°16'N
LONGITUDE	129°00'W	128°56'W	128°50'W	128°48'W
TRANSECT	OFF PRICE IS.			
OFFSHORE DISTANCE (N. MI.)	10	8	5	3
SOUNDING (METERS)	204	216	234	220

DEPTH (METERS)	TEMPERATURE°C			
	SET 29	SET 31	SET 33	SET 35
0	14.3	13.7	13.3	14.3
10	9.0	9.2	9.0	9.5
20	7.8	8.3	8.2	8.1
30	7.4	7.7	7.6	7.8
40	7.0	7.1	7.1	7.2
50	6.8	7.0	6.9	6.9
60	6.7	6.7	6.7	6.9
70	6.6	6.7	6.7	6.7
80	6.6	6.6	6.6	6.6
90	6.5	6.6	6.6	6.6
100	6.5	6.6	6.6	6.6
110	6.5	6.6	6.6	6.6
120	6.5	6.6	6.6	6.6
130	6.5	6.6	6.6	6.6
140	6.5	6.6	6.6	6.6
150	6.5	6.6	6.6	6.6
160	6.5	6.6	6.6	6.6
170	6.5	6.6	6.6	6.6
180	6.5	6.6	6.6	6.6
190	6.5	6.6	6.6	6.6
200	6.5	6.6	6.6	6.6

TABLE 2 (CONTINUED).

SET	37	41
DATE	AUG 1	AUG 1
LATITUDE	52°52'N	52°54'N
LONGITUDE	130°10'W	129°53'W
TRANSECT	OFF SOUTH END OF ESTEVAN GROUP	
OFFSHORE DISTANCE (N. MI.)	20	10
SOUNDING (METERS)	268	252
	TEMPERATURE°C	
DEPTH (METERS)	SET 37	SET 41
0	13.4	14.0
10	10.0	9.7
20	8.7	8.6
30	7.7	7.7
40	7.0	6.9
50	6.6	6.5
60	6.2	6.2
70	5.7	6.0
80	5.7	5.7
90	5.5	5.7
100	5.5	5.7
110	5.5	5.7
120	5.5	5.7
130	5.5	5.7
140	5.5	5.7
150	5.5	5.7
160	5.5	5.7
170	5.5	5.7
180	5.5	5.7
190	5.5	5.7
200	5.5	5.7

TABLE 2 (CONTINUED).

SET	/	45	47	49
DATE	/	AUG 2	AUG 2	AUG 2
LATITUDE	/	52°16'N	52°16'N	52°16'N
LONGITUDE	/	129 23'W	128°12'W	128°2'W
TRANSECT	/	OFF PRICE IS.		
OFFSHORE DISTANCE (N. MI.)	/	24	18	12
SOUNDING (METERS)	/	204	216	234
	/		TEMPERATURE°C	
DEPTH (METERS)	/	SET 45	SET 47	SET 49
0	/	14.1	14.0	14.3
10	/	10.1	10.2	10.2
20	/	8.5	8.8	8.6
30	/	7.7	7.6	7.7
40	/	7.1	7.1	7.2
50	/	6.6	6.6	6.7
60	/	6.2	6.3	6.4
70	/	6.2	6.3	6.4
80	/	6.2	6.3	6.4
90	/	6.2	6.3	6.4
100	/	6.2	6.3	6.4
110	/	6.2	6.3	6.4
120	/	6.2	6.3	6.4
130	/	6.2	6.3	6.4
140	/	6.2	6.3	6.4
150	/	6.2	6.3	6.4
160	/	6.2	6.3	6.4
170	/	6.2	6.3	6.4
180	/	6.2	6.3	6.4
190	/	6.2	6.3	6.4
200	/	6.2	6.3	6.4

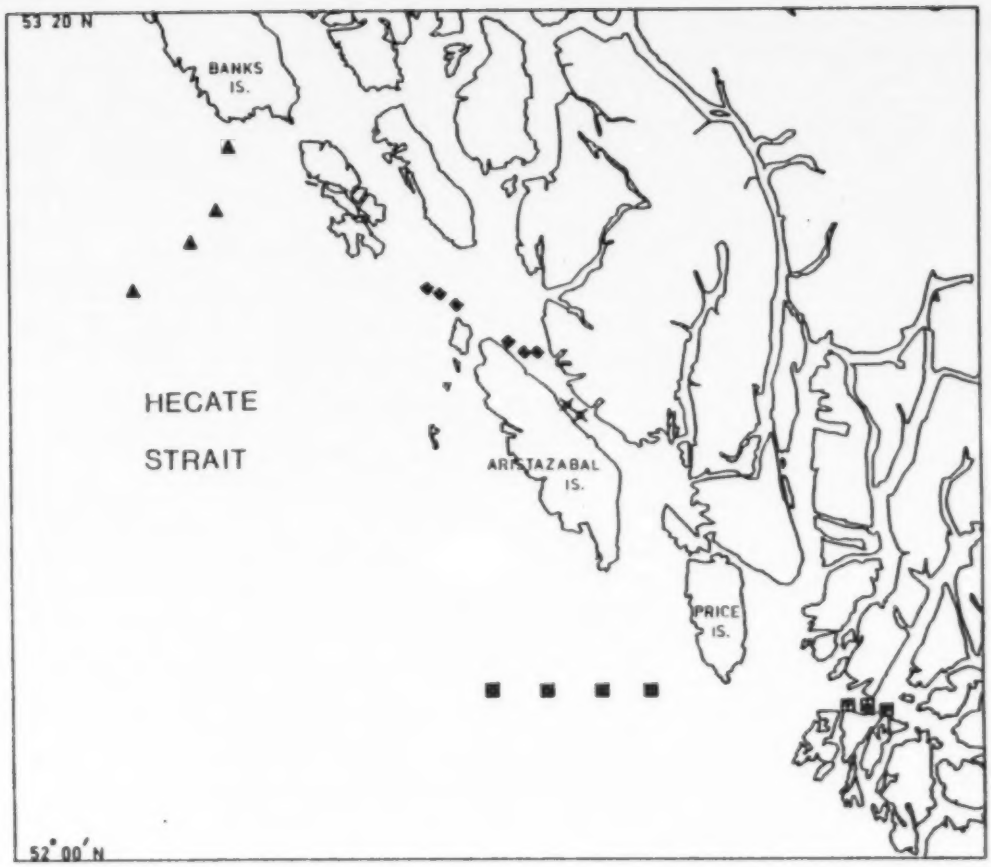

Fig. 1A. Purse seine set locations on the July 6-12 cruise — July 7, ■ ; July 8, ▲ ; July 9, ◆ ; July 10, ✖ ; and July 11, ● .

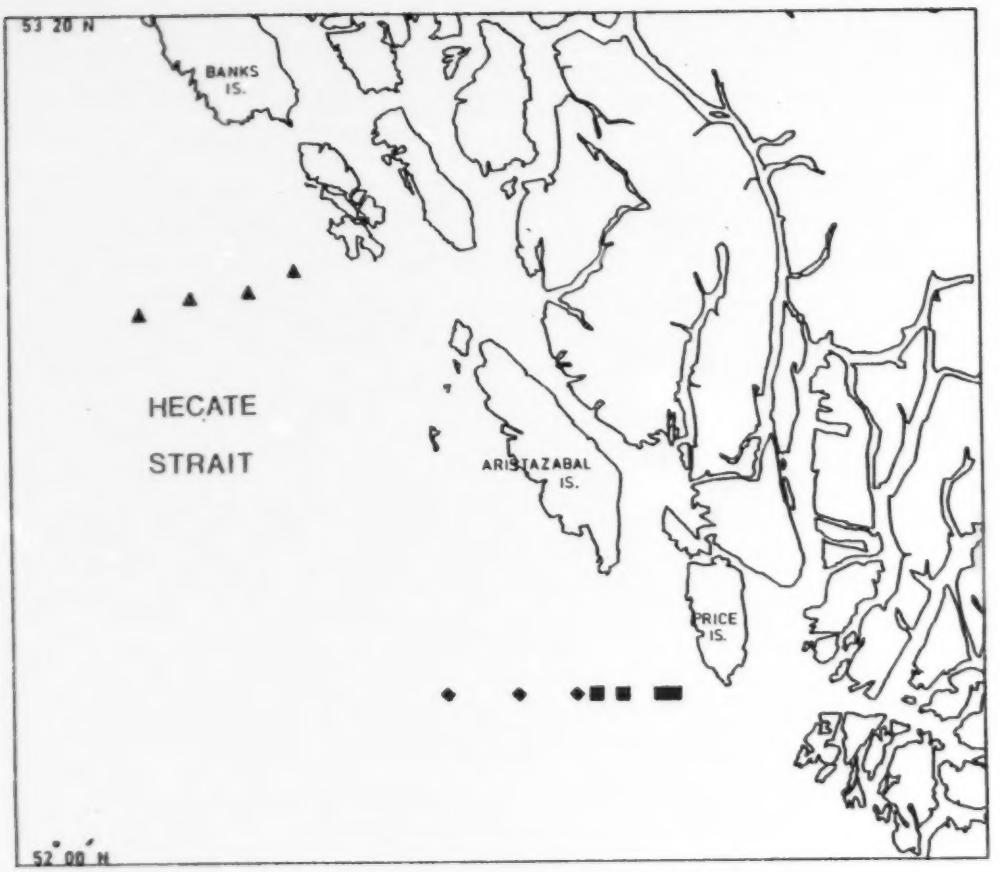

Fig. 1B. Purse seine set locations on the July 30 - August 3 cruise — July 31, ■ ; August 1, ▲ ; and August 2, ◆ .